The current status of teaching staff innovation competence in Ugandan universities: perceptions of managers, teachers, and students

George Wilson Kasule\textsuperscript{a}, Renate Wesselink\textsuperscript{b}, Omid Noroozi\textsuperscript{b} & Martin Mulder\textsuperscript{b}

\textsuperscript{a} Department of Educational Planning and Management, Kyambogo University, Kyambogo, Uganda
\textsuperscript{b} Department of Education and Competence Studies, Wageningen University, Wageningen, The Netherlands

Published online: 30 Apr 2015.

To cite this article: George Wilson Kasule, Renate Wesselink, Omid Noroozi & Martin Mulder (2015): The current status of teaching staff innovation competence in Ugandan universities: perceptions of managers, teachers, and students, Journal of Higher Education Policy and Management, DOI: 10.1080/1360080X.2015.1034425

To link to this article: http://dx.doi.org/10.1080/1360080X.2015.1034425
The current status of teaching staff innovation competence in Ugandan universities: perceptions of managers, teachers, and students

George Wilson Kasule\textsuperscript{a*}, Renate Wesselink\textsuperscript{b}, Omid Noroozi\textsuperscript{b} and Martin Mulder\textsuperscript{b}

\textsuperscript{a}Department of Educational Planning and Management, Kyambogo University, Kyambogo, Uganda; \textsuperscript{b}Department of Education and Competence Studies, Wageningen University, Wageningen, The Netherlands

How competent are university teaching staff to deliver effectively their present and future university duties in Uganda? This question was explored in this study by collecting data from managers ($n = 90$), teachers ($n = 126$), and students ($n = 179$) through a questionnaire administered at Kyambogo University. The results show that teacher performance in the role of innovating; knowledge society facilitating; collaborating and networking; higher education designing and developing; and entrepreneurship, could not be considered as satisfactory. It was also established that there are significant differences in the perception of the aforesaid among the respondent categories. The findings suggest that urgent intervention is needed to develop teacher innovation competence if Uganda wants to have an effective higher education. This study also highlights the centrality of using various internal key stakeholders in the educational system such as students and educational managers if effective teacher performance evaluation is to be attained in universities.

Keywords: innovation competence; status quo; teaching staff; university; Uganda

Introduction

Innovation is the key to surviving and/or thriving in the global economy (Kibwika, 2006). It is presumed that developing countries through quality university education could transform themselves from peasant to knowledge and innovation economies and societies (World Bank, 2003). Moreover, it is predicted that across the globe in the near future, over 50 per cent of employment will consist of jobs that require higher education (Mulder, 2010). As such, universities, regardless of context, are expected to prepare innovative individuals with the capacity to cope with twenty-first century demands (Trilling & Fadel, 2009). However, most universities in Uganda are accused of producing graduates who are not relevant to the country’s labour market needs and that they are ill prepared for the ever changing and competitive knowledge economy (Kasule, Wesselink, & Mulder, 2014). This view is buttressed by Amme and Agaba (2014) and Mamdani (2007), who avow that universities in Uganda duplicate courses, all in the name of attracting more students, which in turn means more revenue for the university, but without considering the market demand for graduates and the socio-economic development needs of the country. Thus, concerted effort is needed from education policy makers, university managers and academic staff, and technocrats in the higher education sector to ensure that universities provide labour market demand-driven programmes whilst ensuring that students are
prepared in such a way that they can be productive in their work places and in society as whole (Kasule et al., 2014).

In an effort to contribute towards addressing the gap of lacking university teaching staff with innovation competence in Ugandan universities, Kasule et al. (2014) advance five innovation competence domains and 14 underlying skills that teaching staff in universities need in order to perform their present and future university tasks. The domains are as follows: innovating; knowledge society facilitating; collaboration and networking; higher education designing and developing; and entrepreneurship. In addition, universities are expected to equip students with innovation knowledge and skills so as to be productive at the place of work and in life in general (Kibwika, 2006). However, there has been no empirical study regarding the extent to which the current population of university teaching staff are competent to carry out the aforementioned task. This study, therefore, sets out to provide insight into the current state of teaching staff competence levels to execute their present and future university tasks effectively.

Theoretical framework

The majority of the studies on teacher performance focus on the effectiveness of the teaching and learning process, and not on aspects such as the teacher’s ability to act competently in the innovation field as well as equipping learners with innovation knowledge and skills. Assessment of teachers has a history that dates as far back as the 1920s (Alderman, Towers, & Bannah, 2012; Marsh, 1987; Ronald, 2013; Wachtel, 1998). Student evaluations of teaching are regularly conducted in universities across the globe and their results are used for both formative practice, to guide teaching practice, and summative practice to underpin staff management and development policies and practices (Alderman et al., 2012; Catano & Harvey, 2011; Palmer, 2012; Villalta-Cerdas, McKeny, Gatlin, & Sandi-Urena, 2014). However, several authors such as Bedggood and Donovan (2012); Drew and Klopper (2014) and Hoon, Lin, and Ling (2013) acknowledge that the use of student evaluations of teacher performance is an important, but a controversial tool in the improvement of teaching quality in universities. Student evaluations are considered essential because students as clients of the university have a right to express their degree of satisfaction towards the instructional process (Alderman et al., 2012). Student feedback on the educational programme and the instructional process is increasingly being seen as a means to benefit teachers’ professional development (Blair & Noel, 2014). However, opponents of student evaluations argue that students have different levels of ability and commitment, and different experience and lack of pedagogical knowledge, among other things, thus, cannot make a well-versed judgement of teaching performance (McMartin & Rich, 1979).

The present study espouses the view that students’ opinions matter in any endeavour aimed at improving the quality of education. Thus, they should be considered in the assessment of teachers’ performance. Besides, students are the primary beneficiaries of any teaching and learning process endeavour. Furthermore, it is advanced that student evaluations provide direct feedback to teachers so that they can refine their courses and teaching practices to provide students with better learning experiences (Fenwick & Parsons, 2000). Moreover, assessment of the quality of higher education processes and products is more than ever before an important focus of attention for various higher education stakeholders (Hendry & Dean, 2002; Van Vught & Westerheijden, 1994). The judgemental model of assessment posited by Hager and Butler (1996) and supplemented by models of teacher effectiveness research (goal and
tasks model; resource utilisation model; working process model; school constituencies satisfaction model; and the accountability model) as presented by Kyriakides, Demetriou, and Charalambous (2006) provided useful insights in conducting this study. The judgemental model of assessment is highly acknowledged within the competence movement for vocational qualifications and in the key skills agenda in higher education (Yorke, 2005). As such, the model is considered to be appropriate for the assessment of workplace performance (Martin, 1997). Meanwhile, models of teacher effectiveness research are seen as a source for generating a set of criteria for teacher evaluation that captures the multiple roles teachers are expected to play in the changing educational environment (Kyriakides et al., 2006).

In teacher performance evaluation, the use of multiple data sources is vital. As such, models of teacher effectiveness research were used to guide this study as they also recommend consideration of various sources for collecting relevant data during the teacher performance evaluation process (Ellett, Wren, Callender, Loup, & Liu, 1996). Hence, the decision to involve university students, teaching staff, and managers. Ronald (2013) espouses the use of multiple sources to provide a solid foundation in the assessment process from which the teaching staff’s job performance effectiveness can be inferred. This makes it possible to have fair and equitable decisions about teaching staff contract renewal, merit pay, promotion and tenure. Due to the heavy criticism levied against the sole use of student evaluations, we concur with authors such as Hager and Butler (1996); Kyriakides et al. (2006); and Ronald (2013) that use of multiple data sources is preferable.

Moreover, most studies that have attempted to examine teacher performance, have relied mainly on student evaluation forms and not multiple data sources, for instance, involving university managers (Alderman et al., 2012; Catano & Harvey, 2011; Palmer, 2012). Hitherto, university managers are part of the policy and decision makers charged with the responsibility of overseeing the implementation of the present and future university core tasks. As such, this study contributes to the existing scientific literature on effective teacher job performance assessment within a prescribed contemporary job profile. The study relies on the strength of incorporating the internal key stakeholders in the university in teacher performance evaluation, particularly on the aspect of innovation competence. The results herein form a basis for interventions to develop and enhance innovation competence of teaching staff in Ugandan universities and other similar countries having a desire to improve the quality of their university education. The following research question guided the study: To what extent are university teaching staff competent to deliver effectively their present and future duties as perceived by the managers, students and the teaching staff themselves, and to what extent does the evaluation of university teaching staff competence, per group differ from each other?

Methods

Design of the study

The study employed an exploratory study design, which is considered useful in directing subsequent research approaches as well as gaining greater understanding of a situation where little or nothing is known (Kumar, 2011). Thus, the exploratory study design was considered appropriate for this study because, currently, little is known about the status quo of teaching staff innovation competence in Ugandan universities.
Context and participants

The study was conducted at Kyambogo University. The university’s vision is to be a centre of professional and academic excellence and its mission is to promote and advance knowledge and development of skills in science, technology and education and such other fields with regard to quality, equity, progress and transformation of society (Kyambogo University, 2007). Kyambogo University was selected because it is charged with the responsibility of overseeing teacher education, training and development programmes in Uganda. This explicitly or implicitly implies that Kyambogo University should have competent academics who can act as models to other universities and tertiary institutions in Uganda. Since Kyambogo’s mission and core activities rotate around advancing and promoting knowledge and development of skills in science, technology and education, and in such other fields regarding quality, equity, progress and transformation of society, it was presumed that the views of managers, teaching staff, and students at Kyambogo University would give a relatively fair picture regarding the extent to which the current teaching staff possess innovation competence.

This study used purposive sampling to select the university managers. It was presupposed that by the virtue of their years of working experience, they possess key staff performance information which is considered useful for the present study (Kumar, 2011). Meanwhile, simple random sampling was used to select the teaching staff and students so as to accord each of them an equal and independent chance of being selected for the study (Kumar, 2011). The Krejcie and Morgan (1970) sample determining table was used to report the sample size (Table 1).

The student category comprised of final year bachelor of education degree students (entry qualification to join the two-year bachelor of education degree programme is diploma in education with at least three years of teaching experience). As such, it was believed that these students, based on their academic and professional understanding, can fairly determine whether their teachers are equipping them with the skills they need in the knowledge and innovation explosion era. Moreover, students are direct beneficiaries of the education system, thus it is critical to seek their views regarding the quality of education that is being provided. The teaching staff were chosen because it is their cardinal role to provide high quality teaching, research and community development. Therefore, the university teaching staff act as agents of socio-economic development, on top of preparing relevant and productive graduates for the various labour fields. It is, therefore, significant to find out how they rate themselves when it comes to determining the extent they think their performance is sufficient in coming up with innovation in higher education. University managers and teaching staff were selected based on the Kyambogo University staff list provided by the human resource department. Meanwhile, the students were selected based on the students’ list for the final year bachelor of education degree students provided by the academic registrar’s department.

<table>
<thead>
<tr>
<th>Category of participants</th>
<th>Population</th>
<th>Sample</th>
<th>Sampling technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers at Kyambogo University</td>
<td>190</td>
<td>130</td>
<td>Purposive</td>
</tr>
<tr>
<td>Teaching staff at Kyambogo University</td>
<td>420</td>
<td>200</td>
<td>Simple Random</td>
</tr>
<tr>
<td>Education degree students at Kyambogo University</td>
<td>600</td>
<td>240</td>
<td>Simple Random</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1210</strong></td>
<td><strong>570</strong></td>
<td></td>
</tr>
</tbody>
</table>
Instrument
The managers, teaching staff, and students responded to a close-ended questionnaire comprising the five innovation competence domains and 14 underlying skills as advanced by Kasule et al. (2014), (see Table 2) along a five-point Likert scale (strongly disagree = 1; strongly agree = 5). The questionnaire was designed to find out the extent to which university teaching staff possessed skills perceived as being important to perform effectively their present and future university tasks in Uganda. Out of the 570 questionnaires administered to the sample population (Table 1), 395 questionnaires were returned and after screening for missing data, 395 were considered usable. This represents a 69.3 per cent response rate, which in social science research is acceptable since the study results can fairly be generalised to the sample population (Kumar, 2011).

Statistical tests
Descriptive statistics were used to summarise and describe the participants’ responses regarding the extent to which they think university teaching staff competence to deliver effectively their present and future duties is considered sufficient (Table 3). Thereafter, an ANOVA test followed up by a post hoc Tukey Test was employed to find out whether the mean scores of the managers, staff and students are significantly different from one another or they are relatively the same. Perceptions regarding teaching staffs’ innovation competence at Kyambogo University (see Table 4) were defined as follows: <1.4 is strong disagreement; 1.5 to 2.4 is disagreement; 2.5 to 3.4 is not sure; 3.5 to 4.4 is agreement; and 4.5 to 5.0 is strong agreement regarding teaching staff possession of innovation competence.

Results
Teaching staffs’ innovation competence as perceived by managers, students and the teaching staff at Kyambogo University
Regarding gender distribution of the managers, majority (58.9 per cent) are male and only (41.1 per cent) are female. Meanwhile, majority (64.3 per cent) of teaching staff are male, whereas (35.7 per cent) are female. Majority (51.4 per cent) of students are male and only (48.6 per cent) are female. Overall, the gender distribution results in the present study concurs with the manifestation that within Ugandan public universities, there are more male managers, teaching staff, and students than females (Uganda National Council of Higher Education, 2012). Hence, this fairly reflects the proportion of male and female teaching and management staff at Kyambogo University. The mean age of the participants was 32.65 (SD = 8.98) years. Meanwhile, in terms of participant’s (managers and staff) highest academic qualification, majority (53.3 per cent) held a master’s degree, followed by bachelor’s degree (34.7 per cent), post graduate diploma (7 per cent), and PhD (5 per cent), respectively. This comparatively depicts the true situation at Kyambogo University in terms of staff’s academic qualifications (Uganda National Council of Higher Education, 2012). The mean of the teaching staff and managers’ length of university service was 8.54 (SD = 3.02) years. This implies that most of the participants involved in the study have sufficient experience and knowledge to give a relatively objective picture regarding the extent to which teaching staff at Kyambogo University possess innovation competence. Besides, majority (33.8 per cent) of the students and teaching staff belonged to arts and social sciences, followed by management and entrepreneurship (22 per cent), science
Table 2. Required university teaching staff competence domains and their underlying skills developed based on the literature study (Kasule et al., 2014).

<table>
<thead>
<tr>
<th>Competence domains and their definitions</th>
<th>Underlying skills</th>
</tr>
</thead>
</table>
| 1. Innovating – teaching staff’s innovative mindset and behaviours and the ability to put these in practice to improve service or product provision | • Desire and concern to proactively take actions to improve one’s knowledge and innovation skills  
• Ability to come up with new things in the area of speciality |
| 2. Knowledge society facilitating – teaching staff’s ability to create and disseminate knowledge and skills needed by the students and society; and to act as information consultant in an area of speciality and general life and societal issues | • Ability and willingness to work with others without prejudice in creating and disseminating knowledge needed by students to be relevant and productive at work and society in general  
• Ability and willingness to cater for students’ individual differences during the instructional process  
• Ability and willingness to authentically demonstrate to the students the effect of a globalised knowledge society |
| 3. Collaborating and networking – teaching staff’s ability to work well with and through teams, partnerships and networks to improve service or product provision | • Ability and willingness to build and or maintain ethical relationships or networks at the place of work  
• Ability and willingness to work co-operatively within diverse teams at the place of work  
• Ability and willingness to partner with internal and external education stakeholders to improve service or product provision |
| 4. Higher education designing and developing – teaching staff’s ability to envisage the needed present and future knowledge and skills students require in the global knowledge and innovation economy. As such, structure study programmes that are responsive to the labour market/society needs and demands | • Ability and commitment to structure learning experiences that equip students with the knowledge and skills to live sustainably in the global economy  
• Ability and commitment to authentically structure content that equips students with the knowledge and skills to be productive and innovative at the place of work and society as a whole  
• Ability and commitment to conduct research in the area of speciality  
• Ability and commitment to design interactive educational materials |
| 5. Entrepreneurship – teaching staff’s entrepreneurial mindset and behaviour and put these in practice through undertaking commercial and/or non-commercial ventures | • Ability and commitment to do and/or assist others be self-driven and open-minded towards exploring business opportunities in area of specialised knowledge  
• Ability and commitment to do and/or assist others do things better as well as searching for new ideas in product or service provision |

(15.8 per cent), vocational studies (15 per cent), and technology (13.4 per cent), respectively. This portrays a realistic distribution of student enrolment and teaching staff deployment at Kyambogo University. Majority (44 per cent) of the managers worked
<table>
<thead>
<tr>
<th>Faculty</th>
<th>Teaching staff ((n = 126))</th>
<th>Students ((n = 179))</th>
<th>Total</th>
<th>Percentage</th>
<th>Administrative department</th>
<th>Managers ((n = 90))</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and social sciences</td>
<td>45</td>
<td>58</td>
<td>103</td>
<td>33.8%</td>
<td>Academic registrar</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Management and entrepreneurship</td>
<td>31</td>
<td>36</td>
<td>67</td>
<td>22%</td>
<td>University secretary</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td>Science</td>
<td>20</td>
<td>28</td>
<td>48</td>
<td>15.8%</td>
<td>Students welfare</td>
<td>10</td>
<td>11.4</td>
</tr>
<tr>
<td>Vocational studies</td>
<td>15</td>
<td>31</td>
<td>46</td>
<td>15%</td>
<td>Finance and audit department</td>
<td>15</td>
<td>16.8</td>
</tr>
<tr>
<td>Technology</td>
<td>15</td>
<td>26</td>
<td>41</td>
<td>13.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
for the academic registrar’s department, followed by university secretary’s department (27.8 per cent), student welfare department (16.8 per cent), and finance and audit department (11.4 per cent), respectively. This fairly depicts the staffing distribution of university administrative and management staff (Table 3).

Regarding the current innovation competence status of teaching staff in Uganda, results in Table 4 reveal that managers are more negative than the students and teachers regarding the extent to which they perceive teaching staff as sufficiently possessing innovation skills in Ugandan universities. In general, it can be seen in Table 4 that scores on innovating domain are the lowest. However, it is also worth noting in Table 4 that the SDs are high, this implicitly or explicitly indicates that all the respective participants of each stakeholder group do have different opinions regarding the extent to which they perceive teaching staff as sufficiently possessing innovation skills in Ugandan universities.

Is there difference in perception between managers, students and teachers regarding the extent to which teaching staff possess innovation competence?

ANOVA and post hoc Tukey Test results (Table 5) showed that there were statistically significant differences among the three categories of respondents regarding the extent they think teaching staff sufficiently possess innovation skills in Ugandan universities. The results in Table 5 further indicate that the differences in mean were small as depicted by effect size scores.
Table 5. Tukey HSD – multiple comparisons.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Respondents category</th>
<th>(J) Respondents category</th>
<th>Mean Difference (I–J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>F</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovating</td>
<td>Students</td>
<td>Teaching staff</td>
<td>0.23</td>
<td>0.13</td>
<td>0.222</td>
<td>22.48*</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Teaching staff</td>
<td>Managers</td>
<td>1.02*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.23</td>
<td>0.13</td>
<td>0.222</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Managers</td>
<td>0.79*</td>
<td>0.16</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-1.02*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Teaching staff</td>
<td>-0.79*</td>
<td>0.16</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge society</td>
<td>Students</td>
<td>Teaching staff</td>
<td>0.11</td>
<td>0.12</td>
<td>0.602</td>
<td>24.04*</td>
<td>0.11</td>
</tr>
<tr>
<td>facilitating</td>
<td>Teaching staff</td>
<td>Managers</td>
<td>0.91*</td>
<td>0.13</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.11</td>
<td>0.12</td>
<td>0.602</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Managers</td>
<td>0.79*</td>
<td>0.14</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.91*</td>
<td>0.13</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Teaching staff</td>
<td>-0.79*</td>
<td>0.14</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborating and</td>
<td>Students</td>
<td>Teaching staff</td>
<td>0.06</td>
<td>0.13</td>
<td>0.874</td>
<td>17.75*</td>
<td>0.08</td>
</tr>
<tr>
<td>networking</td>
<td>Teaching staff</td>
<td>Managers</td>
<td>0.86*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.06</td>
<td>0.13</td>
<td>0.874</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Managers</td>
<td>0.79*</td>
<td>0.16</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.86*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Teaching staff</td>
<td>-0.79*</td>
<td>0.16</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher education</td>
<td>Students</td>
<td>Teaching staff</td>
<td>0.23</td>
<td>0.13</td>
<td>0.175</td>
<td>22.77*</td>
<td>0.10</td>
</tr>
<tr>
<td>designing and</td>
<td>Teaching staff</td>
<td>Managers</td>
<td>0.98*</td>
<td>0.14</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>developing</td>
<td>Managers</td>
<td>Students</td>
<td>-0.23</td>
<td>0.13</td>
<td>0.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Managers</td>
<td>0.74*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.98*</td>
<td>0.14</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Teaching staff</td>
<td>-0.74*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Students</td>
<td>Teaching staff</td>
<td>0.12</td>
<td>0.14</td>
<td>0.644</td>
<td>16.73*</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Teaching staff</td>
<td>Managers</td>
<td>0.90*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.12</td>
<td>0.14</td>
<td>0.644</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Managers</td>
<td>0.77*</td>
<td>0.17</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>Students</td>
<td>-0.90*</td>
<td>0.15</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>Teaching staff</td>
<td>-0.77*</td>
<td>0.17</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *The mean difference is significant at the 0.05 level.
Discussion

The aim of this study was to establish the extent to which university teaching staff are competent to deliver effectively their present and future university duties in Uganda. In addition, the study also aimed at establishing whether there are significant differences in the evaluation of teaching staff competence by the teachers themselves, the managers and the students in Uganda. As mentioned earlier, in this knowledge and innovation explosion era, contemporary university teaching staff ought to possess innovating; knowledge society facilitating; collaborating and networking; higher education designing and developing; and entrepreneurship competence, if they are to perform their duties effectively (Kasule et al., 2014). The results of this study, however, reveal that teaching staff’s innovating skill in Ugandan universities is rated lowest, followed by knowledge society facilitating, entrepreneurship, collaborating and networking and higher education designing and developing skills, respectively. Overall, the study results herein exposes that university teaching staff in Ugandan universities have insufficient skills to deliver effectively their present and future duties. This concurs with Kibwika (2006), who argues that teaching staff in Ugandan universities must learn to make change if they are to prepare graduates with the capability to foster socio-economic development through innovation at the workplace. In this light, interventions are urgently needed to develop all the five innovation competence domains with their underlying skills assessed herein. Besides, we live in a world characterised by rapid change in every aspect of life. As such, teaching staff in universities ought to be pioneers as well as assist others to do different things in different ways, rather than the same things in different ways in an attempt to address problems and challenges in the rapidly changing knowledge economy (Dale, 2005; Kibwika, 2006; Wesselink, 2010). Besides, universities as traditional knowledge institutions are expected to be leading future service industries and need to effectively equip people with knowledge and innovation skills that can enable them not to merely survive but also to thrive in the global knowledge economy (Olssen & Peters, 2005).

Moreover, the global knowledge economy has placed and/or is still placing new demands on people in the world of work and life in general (Wesselink, 2010). The findings herein support Kasozi (2003) who asserts that it is important for Ugandan universities to have vibrant industry and community linkage and collaboration programmes if they want to play a catalyst role in fostering socio-economic development in the country. This concurs with Bisaso (2010) who posits that little or no collaboration and networking among the academics in Ugandan universities is one of the stumbling blocks hampering sound reforms in the Ugandan higher education sector, among other things. The present study findings also coincide with Olssen and Peters (2005) who advance that higher education is seen as a key driver in the knowledge economy and as a consequence universities are required to develop links with industry and business in a series of new venture partnerships. Schleicher (2011) contends that high performing education systems are characterised as knowledge rich in which collaborative partnerships and leadership are essential to formulating educational policy. Thus, teaching staff in universities ought to have sufficient collaboration and network skills if their institutions are to benefit from national and international partnerships, linkages and collaboration programmes.

The findings of this study are in agreement with most externally initiated studies of education in Africa undertaken during the early 1990s and up to now, that African education faces severe challenges (Samoff, 2003; Sawyerr, 2004; Trust Africa Policy Brief, 2010; Van Deuren, 2013), for example, irrelevant curriculum, shortage of
competent staff, poor management and inefficient administration, dilapidated infrastructure, and very high teacher–student ratios. Consequently, the higher education sector’s ability to meet the national development needs of most of African countries such as Uganda through research, innovation and knowledge production is jeopardised (Collins & Rhoads, 2008; Eisemon & Salmi, 1993; Kibwika, 2006). Concern for how learning takes place in higher learning institutes and how instruction and assessment affect the quality of learning is desirable, because students need to acquire knowledge and skills that can be transferable in the workplace (Mikre, 2010; Mulder, 2014; Wesselink, 2010). This resonates with the assertion that university teaching staff should pass on entrepreneurship knowledge and skills to students so that they are more of job creators than job seekers (Alberta Education, 2011; Abaho, 2013). Therefore, Ugandan universities should endeavour to have adequate teaching staff with higher education course design and development competence. Moreover, Altbach and Teichler (2001) and Bloom, Canning, and Chan (2006) affirm that high quality higher education is a leading instrument for promoting socio-economic development. Thus, universities in Uganda must invest a considerable amount of time and funds in attempts to improve their core activities of teaching and learning, research, innovation and community service (Kasozi, 2003; Kibwika, 2006; Mamdani, 2007).

Research on educational and instructional effectiveness shows that teacher behaviour patterns that have been found to relate to student outcomes include clarity, feedback, classroom management, and communication of teacher expectations (Den Brok, Brekelmans, & Wubbels, 2004). This study, however, posits that these teacher behaviours are limited to instructional process within the educational institution. Hitherto, the roles in this knowledge and innovation explosion era have changed. This, therefore, implies that teacher behaviours for effective teacher performance have to be redefined. Accordingly, the results of this study have showed that innovation competence in a contemporary education system is paramount for the realisation of better student learning achievement and outcomes. As such, this study provides invaluable insight regarding the skills, the higher education teacher need to cope with the fast changing higher education environment. This is critical, if successful higher education reform is to be realised in any given country.

Limitations and suggestions for future research
The present study was an exploratory study involving a small sample of managers, students, and teaching staff at Kyambogo University to represent the target population in Uganda. Kyambogo University being a public university might not have reflected well the characteristics of private universities because teaching staff, managers, and students in such universities might not be exactly the same in terms of qualification, work experience, and work environment. Furthermore, due to time constraints, we only used quantitative data collection and analysis and we suggest that further research should be conducted covering both public and private universities as well as use mixed research methods to test the extent to which the results can be generalised. In the event that teaching staff in Ugandan universities do not sufficiently possess innovation competence as presented in this study, there is need to empirically show the kind of professional development activities that could be used to mitigate the problem. It would also be interesting to replicate the study including managers, teachers and students so as to compare the results herein in a different context.
Conclusion
The present study is set out to find out the current status of teaching staff innovation competence in Ugandan universities, as perceived by the managers, teachers, and students. It also aimed at establishing the extent to which the evaluation results per group differed from each other. The results herein show that teaching staff performance in Ugandan public universities was not considered sufficient when it comes to the roles of innovating; knowledge society facilitating; collaborating and networking; higher education designing and developing; and entrepreneurship. The study’s findings also show that the teaching staff and students have more or less the same perception regarding the extent to which university teaching staff possesses innovation competence at Kyambogo University, while the managers have a different and a less positive perception regarding the extent to which teaching staff possess innovation competence at Kyambogo University. Hence, it is fair to infer that this is unhealthy to Uganda’s higher education sector in its quest to foster the socio-economic development of the country and must be mitigated. This is based on the assumption that relevant and high quality education is crucial for the progress of individuals, organisations and society as a whole. However, it vital to recognise that without the education system having innovation-oriented teachers, national development and improvement of people’s quality of life can hardly be realised.

Acknowledgements
This research was supported by the Netherlands Organization for International Cooperation in Higher Education (Nuffic) through a grant awarded to George Wilson Kasule. We would like to express our gratitude for this support. We would also like to thank all the managers, the teaching staff and the students at Kyambogo University who participated in this study for their contributions.

Disclosure statement
No potential conflict of interest was reported by the authors.

References


