Monitoring Program Effectiveness with Competence Assessment Rubrics: The Carolina MPA
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Abstract

Assessing student learning is a necessary prerequisite for any program that wants to know whether it is achieving its learning objectives. In addition, many accrediting bodies require the assessment of learning objectives. The case study describes how the Carolina MPA program used rubrics in the process of implementing a competency-driven curriculum. We discuss questions related to competency-based assessment that we experienced of the Carolina MPA program, i.e.:

- How do stakeholders develop a shared understanding of competency-based student learning outcomes?
- What is the best approach to design, implement and evaluate rubrics?
- How can programs ensure that the competency-based assessment meets the performance measurement needs of the organization?
- How can competencies come to life and impact teaching and learning?

Theoretical Background

Fostered by the rise of constructivist learning theory, authentic assessment, performance assessment and connected approaches have been discussed in educational research since the mid-nineties (cf.Duffy & Cunningham, 1996).

The paradigm shift from 'assessment of learning' towards 'assessment for learning' plays an important role for changing from input to output orientation of teaching and learning and support students' critical thinking abilities (Rennert-Ariev, 2005). Instead of assessing how well students can reproduce knowledge imparted by the instructor (input), the focus shifts to the competencies students can apply (output).

Competencies are an integrated, complex construct of knowledge, skills and attitudes that can be used in order to solve arising problems and succeed in handling (new) situations (Baartman et al., 2007).

Instructional Design

In close collaboration of instructional designers, program leaders and program faculty, eight analytical rubrics were developed to capture how well students are performing in central competencies. The intermediary competencies served as analytical descriptors for the main learning outcomes.

The rubrics articulate fundamental criteria for each intermediary competency (IC), which together form the eight main competencies for the MPA program. Each IC comprises descriptors and indictors for different levels of attainment:

- At an entry level, the student understands what it takes to become competent.
- At an evolving level, the student is learning relevant skills.
- At an accomplished level, the student is able to perform tasks that demonstrate the competency.

Each core curriculum class is tied to 2-3 distinct intermediary competencies. Faculty usually choose a specific assignment that matches the competence they are asked to track. The data is entered and stored using the grade book feature of UNC's learning management system Sakai.
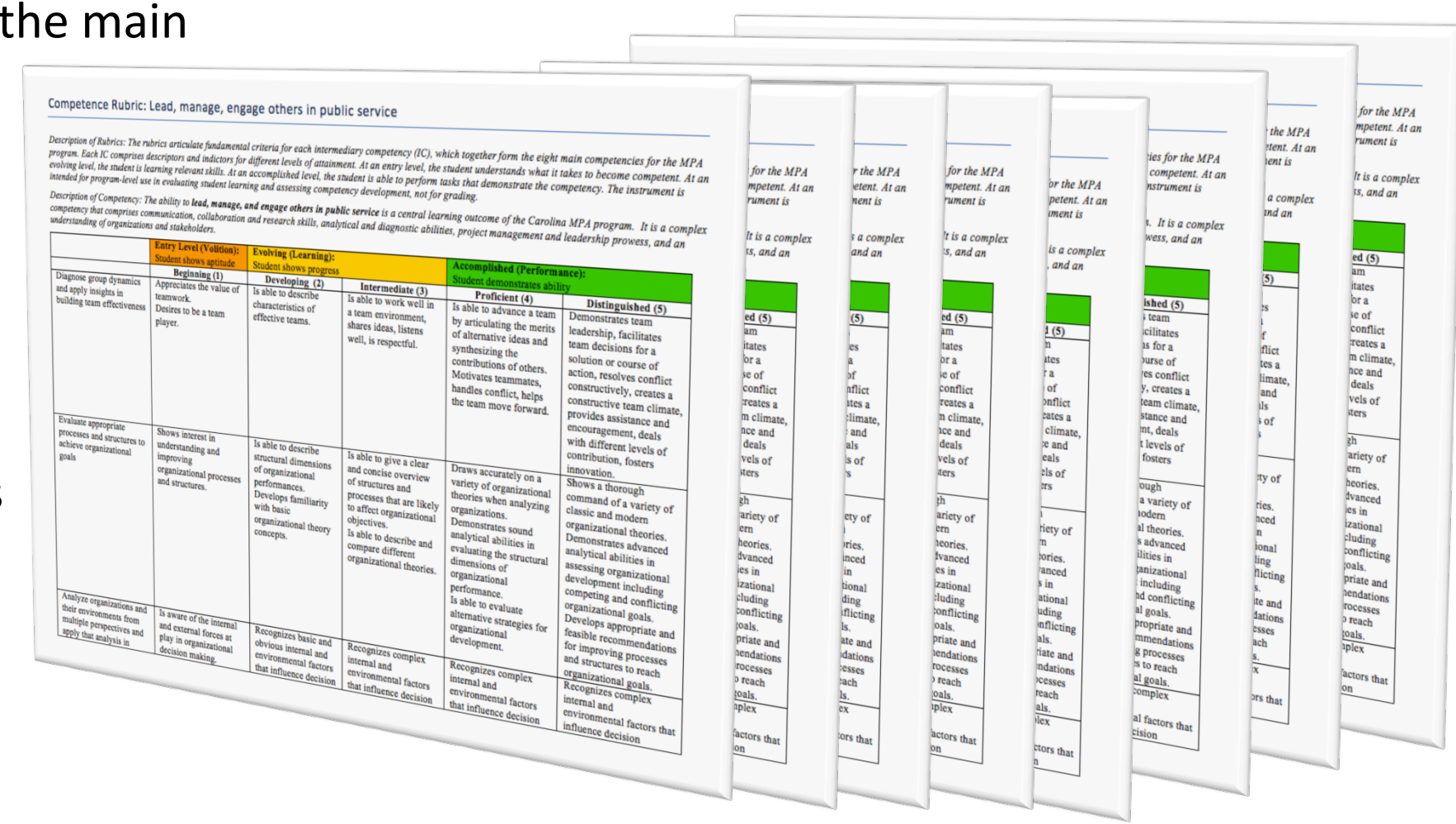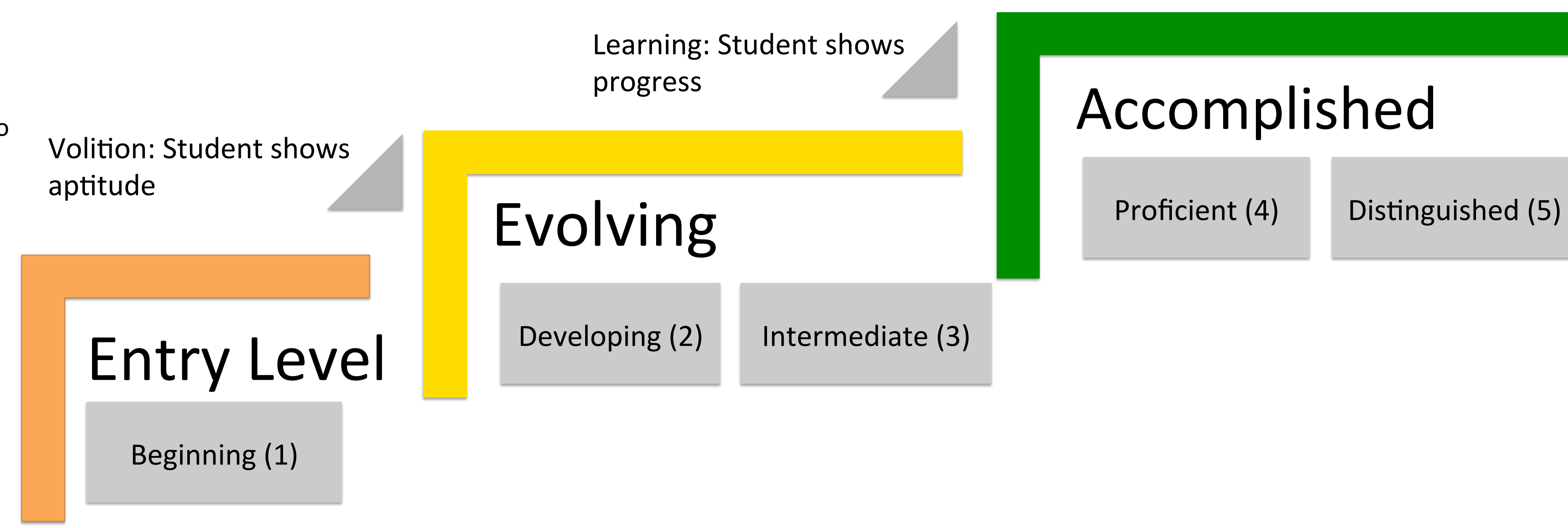

Fig. 1: Competency-Based Curriculum Carolina MPA: Central Learning Outcomes and Intermediary Competencies – 8 core and 25 intermediary competencies.

Fig. 2: Rubric Development Process

Fig. 3: Levels of Attainment used in Carolina MPA Competence Assessment Rubrics

Pedagogical Outcomes

Though faculty perception and acceptance of the competence monitoring process varies across the program, there is a general consensus that the rubrics support an accurate and comparable rating.

The competence assessment rubrics give teachers a tool to report their students' skills and abilities that is more nuanced than grading.

The process of designing and implementing the assessment rubrics allowed the faculty to reflect upon what it means to be and what it takes to become competent as a future public administration leader.

The rubrics have become instrumental in the instructional design of specific classes within the program:

PUBA 745 requires students to reflect on how they apply and integrate their learning from five required MPA courses in professional public service work. We were able to repurpose and adapt the competence assessment rubrics in a grading rubric for the writing assignment in this course.

PUBA 746 is a portfolio class where students are asked to demonstrate selected competencies through a collection of academic and professional products. Again, a specific grading rubric was developed that will be used by the portfolio review committee in the final exam process.
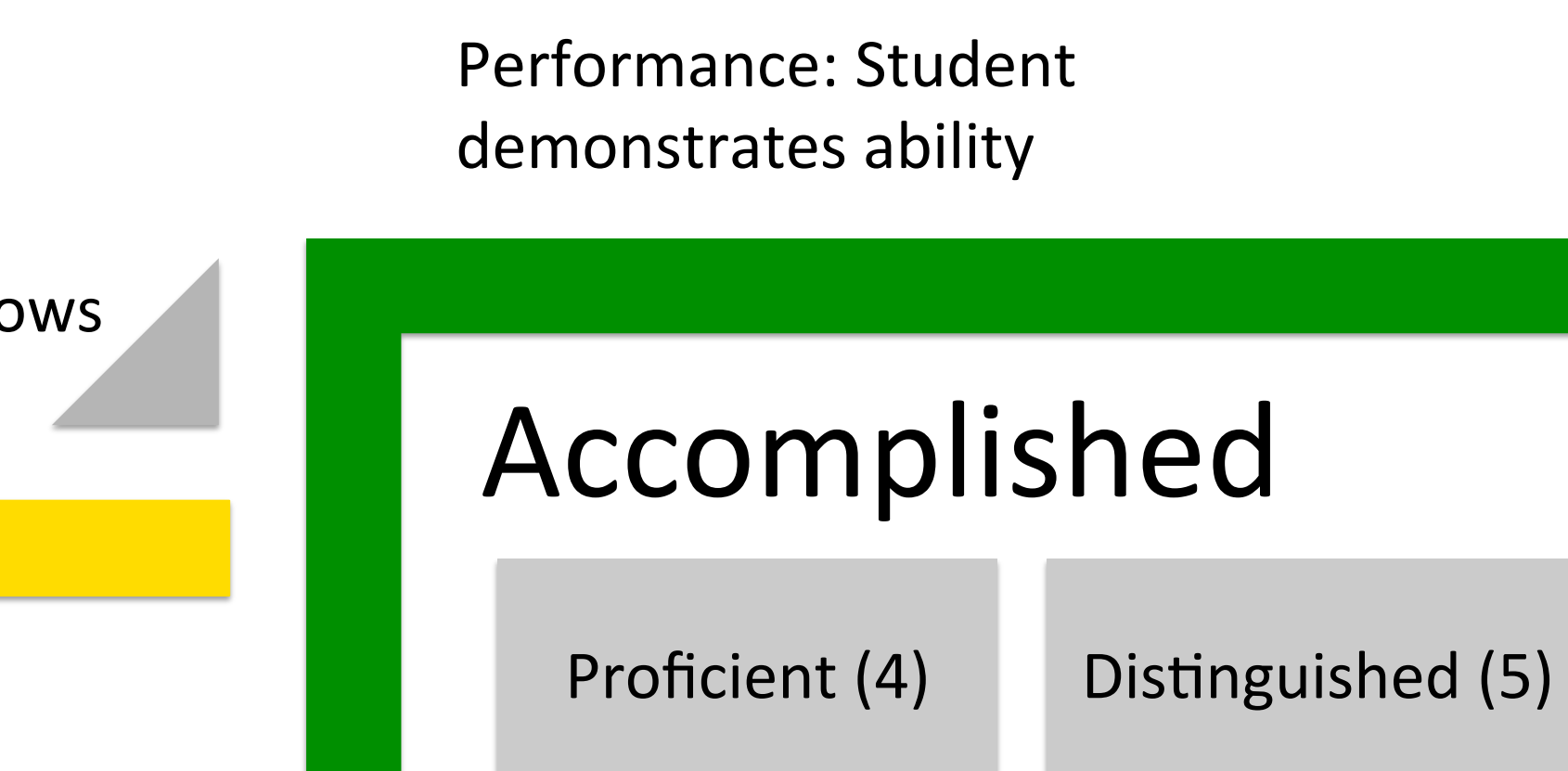
Context

The Carolina MPA offers a highly selective graduate program in both residential and online format to small cohorts of students. It is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA). NASPAA accreditation standards have undergone a shift towards a competency-focused curriculum. Implementing competency assessment in line with the new accreditation standard has potentially large implications, since it is tight to the content, curriculum, teacher practices and standards for learning (cf. Calarysse & Raffel, 2007).
In 2012, UNC has rebuilt the Carolina MPA curriculum around program specific competencies (Fig. 1) and decided to track these competencies in an assessment process..

Objectives

The assessment process is designed to track how well the program is performing over time, specifically:

- Gather comparable ratings of student competencies, e.g., identify student groups that systematically perform higher/lower.
- Offer performance management data to the program, e.g., identify areas of the curriculum that are not at the outcome-level the program seeks to achieve.

Results

The new curriculum began with the 2012-2013 year, and we have first results in measuring the overall competency of students. Fig. 4 and 5 display preliminary outcomes of the assessment.

- The aggregated ratings in comparison between different student groups show the potential of the approach for monitoring program effectiveness. They offer first clues for pedagogical interventions that address the needs of specific learners.

- The ratings of individual students show a satisfactory level of diversity. This indicates that teachers assign levels of attainment diligently, instead of representing the learning outcomes of their own class in a favorable manner.
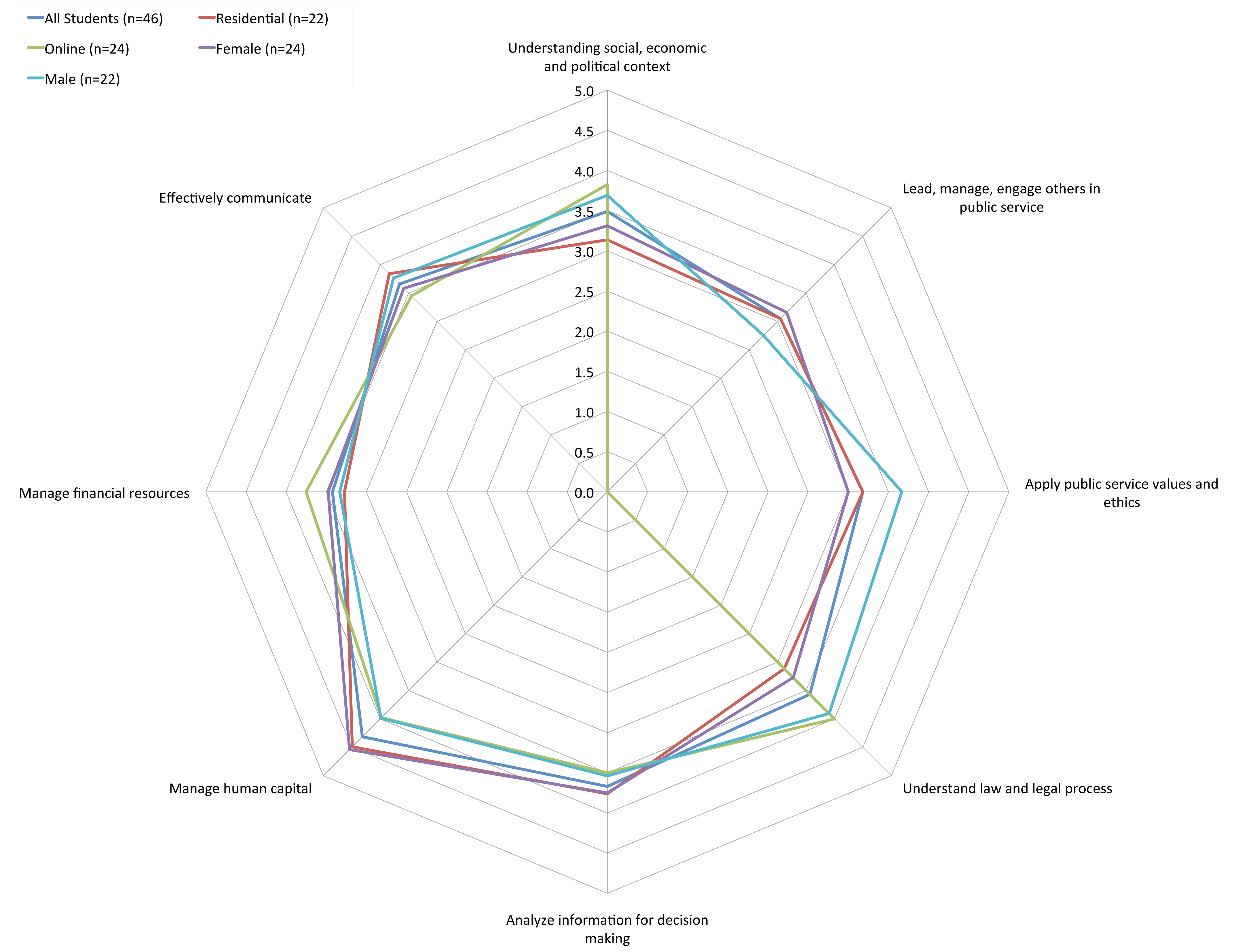

Fig. 4: Aggregated performance means for central learning outcomes of different student groups (2012/2013), n=46
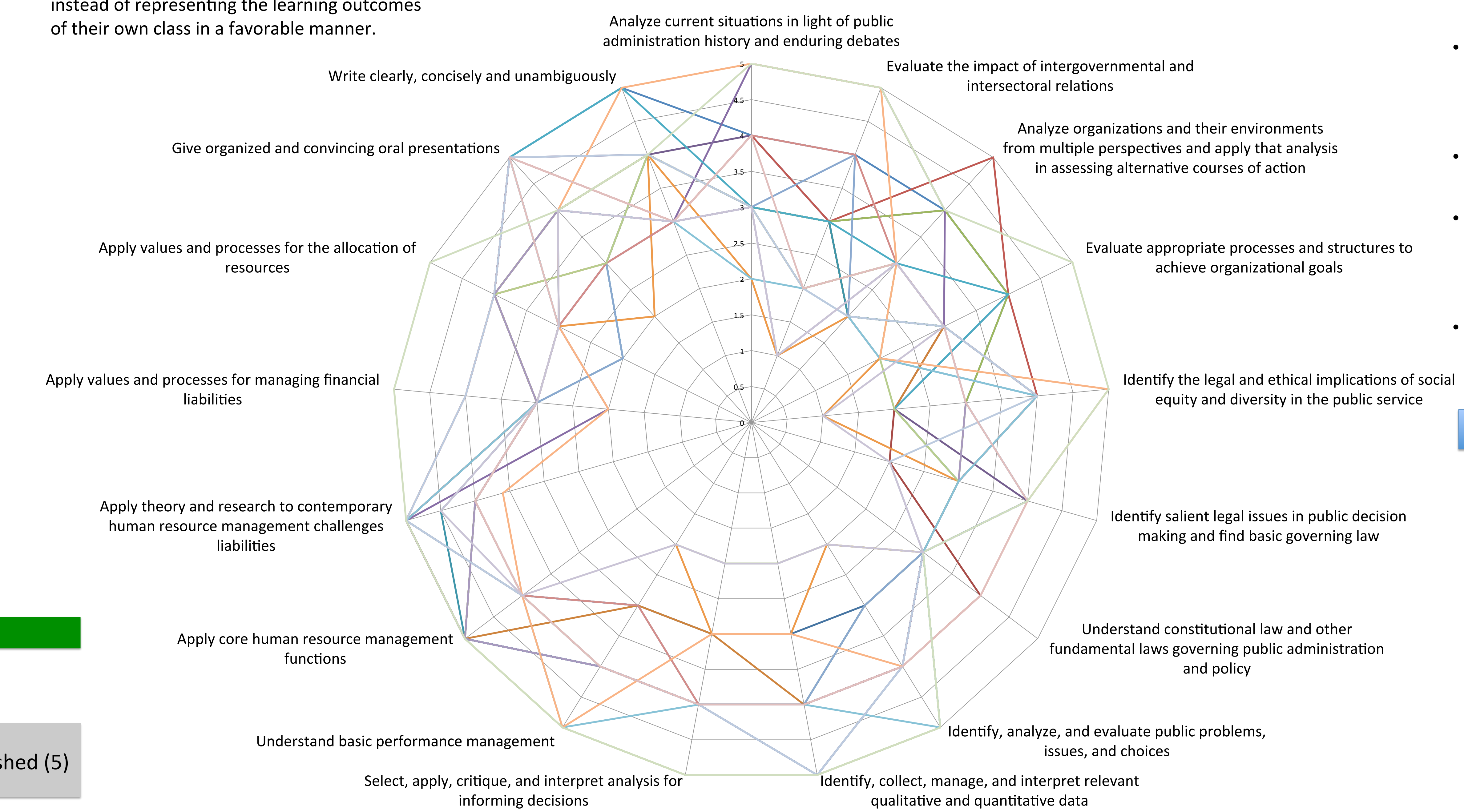

Fig. 5: Performance of Individual Students at Tracked Intermediary Competencies, Residential Program, 2012 Cohort (N=22)

Limitations

- Since there is no baseline assessment of students entering the program, it is impossible to differentiate between competencies acquired during the program and abilities the students transferred from prior learning.

- Each intermediary competence is only tracked once in the core course it is assigned to. Thus, we cannot depict development/change over time.

- Elective courses are not part of the competence assessment.

- Since each teacher assesses the intermediary competencies individually, we have no data on inter-rater reliability for the competence assessment rubrics.

- At a program level, processes and implications of data analysis are still work in progress.

References

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