



Improving the efficiency of MCQ development

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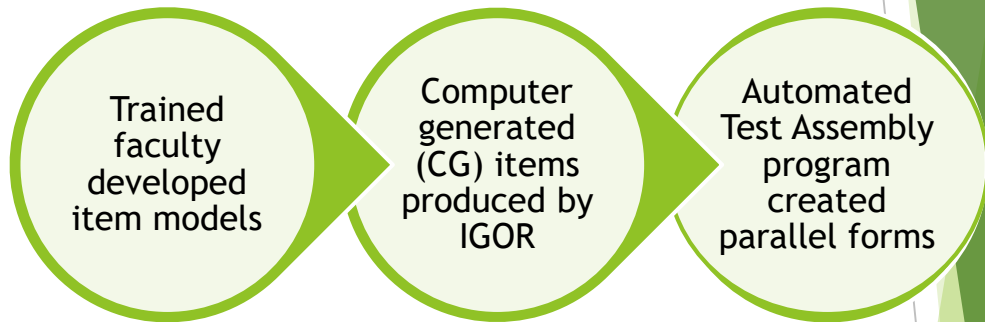
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BACKGROUND:

- ▶ Generating **items by hand**, one-by-one, is time consuming
- ▶ Creating **item models** and applying Item GeneratOR (IGOR) (an automated item generation program) can efficiently create a high volume of items
- ▶ Automated Test Assembly software can create parallel test forms, negating the need to create new assessments each year

METHOD:

Item Development



Item quality assessment

- ▶ 4 external, blinded subject matter experts evaluated item quality
- ▶ 15 computer generated (CG) items were compared with 15 previously hand generated (HG) items

RESULTS:

9	23,653	60
Cognitive Models	Items	20-item parallel forms

- ▶ No difference in the item quality between CG and HG items
- ▶ External item quality reviewers could not distinguish CG from HG items

[Follow this link for details on item generation, test assembly, methods, and results](#)

Key reference: Gierl et al. Medical Education 2012;46:757-65

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