

Table 4: Teacher consolidation and task-composition ablation on Qwen3-VL-4B. R1–R3 denote segmentation, progression, and relation teachers. Full MT-OPD is EventLens with all three teachers; the single-teacher oracle selects the best individual score per metric.

| Variant               | TimeLens<br>avg mIoU | E.T. Bench<br>Avg | Video<br>MME<br>Avg | Vino<br>Ground<br>Score | Video<br>TT<br>Score | Holmes<br>Acc | MLVU<br>Avg | LongVideo<br>Bench<br>Avg |
|-----------------------|----------------------|-------------------|---------------------|-------------------------|----------------------|---------------|-------------|---------------------------|
| Base                  | 46.65                | 34.55             | 65.00               | 37.00                   | 36.90                | 39.96         | 56.77       | 60.70                     |
| R1 teacher            | 50.84                | 40.34             | 65.30               | 39.20                   | 38.20                | 40.12         | 58.76       | 61.10                     |
| R2 teacher            | 50.76                | 40.94             | 65.40               | 45.40                   | 39.50                | 40.61         | 59.76       | 61.80                     |
| R3 teacher            | 50.96                | 39.87             | 65.00               | 37.80                   | 37.20                | 39.19         | 57.57       | 61.60                     |
| Single-teacher oracle | 50.96                | 40.94             | 65.40               | 45.40                   | 39.50                | 40.61         | 59.76       | 61.80                     |
| MT-OPD (R1+R2)        | 50.73                | 41.44             | 65.40               | 45.00                   | 39.50                | 40.72         | 59.36       | 61.70                     |
| Full MT-OPD           | 50.75                | 41.47             | 65.30               | 45.00                   | 38.80                | 40.28         | 58.37       | 61.60                     |